

REMARKS-General

By the above amendment, Applicant has amended claims 1-31, and 33-35 to define the invention more particularly and distinctly so as to overcome the technical rejections and define the invention patentably over the prior art. In addition, these amendments correct minor typographical errors and make other non-substantive changes in claims 2,8, 9,10, 22, 23, 31 and 33.

These remarks are grouped under the following subheadings:

A1. The Rejection Of Claims 1-11, 17, 23-35 Over Warnock In View Of Kubota Is Overcome.

A2. The Rejection Of Claims 12-16 And 18-22 Over Warnock In View Of Kubota And Bugaraev Is Overcome.

B. The Rejection Of Claim 9 For Lack Of Enablement Is Overcome.

C. O.A. Paragraph 27 erroneously groups claims independent 32-35 with the rejected claims 1-31.

A1. The Rejection Of Claims 1-11, 17, 23-35 Over Warnock In View Of Kubota Is Overcome.

A2. The Rejection Of Claims 12-16 And 18-22 Over Warnock In View Of Kubota And Bugaraev Is Overcome.

The O.A. rejected independent claim 1 on Warnock and Kubota. Claim 1 has been amended to define patentably over these references, and any combination thereof. Applicant requests reconsideration of this rejection, as now applicable to claim 1 and the relevant dependent claims, for the following reasons:

1. Amended claim 1 makes clear that steps b through d are performed in the absence of reader input, thus, combination of Warnock and Kubota does not arrive at the claimed invention.

2. Even if combinations of Warnock, Kubota, and/or Bugaraev arrived at the present invention, it would be inappropriate to consider these combinations in an obviousness determination for the following reasons:

a) Warnock And Kubota Do Not Contain Any Justification or Motivation to Support Their Combination to Arrive at the Invention of the Amended Claims.

- b) Warnock, Kubota, and Bugaraev are individually complete, and solve different problems from the present invention.
 - c) Warnock teaches away from the present invention and from combinations with other inventions.
 - d) The present invention yields advantages not appreciated by Warnock, Kubota, or Bugaraev.
 - e) Nobody has attempted to combine Warnock, Kubota, and/or Bugaraev in the manner suggested by the Examiner.
 - f) The present invention is in a different field from Kubota, and thus combination of Kubota with Warnock is not appropriate.
3. The index of claim 3 is different from that described in Kubota, and thus, the rejection of this claim over Warnock-Kubota is overcome.
4. The index of claims 4, 5, 6, 7, 17, 23 and 31 is different from that described in Kubota, and thus, the rejection of these claims over Warnock-Kubota is overcome.
5. Figure 3c of Warnock is not germane to claims 25, 26, 27 and 28, and thus, the rejection of these claims over Warnock-Kubota is overcome.

6. Bugaraev does not disclose any material related to claims 16, 18, 20, 21, and 22, and thus, the rejection of these claims over Warnock-Kubota-Bugaraev is overcome.

7. It is unclear that Kubota should qualify as prior art to all claims in the pending application.

The References And Differences Of The Present Invention Thereover

Prior to discussing the claims and the above seven points, applicant will first discuss the references and the general novelty of the present invention and its unobviousness over the references.

Warnock describes a reader for displaying an electronic document stored in a predetermined format. A defining feature of Warnock is this predetermined format, which allows an author to ensure that all readers of said document see precisely the same formatting, as originally intended by the author. Warnock additionally describes methods to simplify navigation through a document, so that a reader can rapidly find desired sections of text. As pointed out by the Examiner, Warnock does not disclose c) identifying at least one reference, contained in at least one additional section of text, to a concept related to the concept identified in step b (O.A., page 3). Warnock is an invention in the fields of "COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS"

(345) and “DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT” (715).

Kubota describes a system and method for searching a document, *in response to a specific user request*. Kubota describes a method by which two documents may be compared, based on unique character strings that may be extracted from each. As pointed out by the Examiner, “Kubota discloses a system outputs result of search on a screen a list of titles 927 on various articles . . . relating to Olympics.” Kubota is an invention in the field of “DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA STRUCTURES” (707) .

Bugaraev describes a method to extract linguistic information from documentation to create an online help database. A merged file is used to identify key terms that are used for searching. Bugaraev is an invention in the fields of “DATA PROCESSING: SPEECH SIGNAL PROCESSING, LINGUISTICS, LANGUAGE TRANSLATION, AND AUDIO COMPRESSION/DECOMPRESSION” (704), “DATA PROCESSING: DATABASE AND FILE MANAGEMENT OR DATA STRUCTURES” (707), and “DATA PROCESSING: PRESENTATION PROCESSING OF DOCUMENT” (715).

The present invention describes a method to provide a reader with additional information about concepts referred to within an electronic text, that may not initially have been appreciated by said reader as being important or specifically requested by the reader. As amended, claim 1 limits the application of steps b through d to situations in which the reader provides no input from the initiation of step b to the completion of step d.

The O.A. makes clear that individually, none of these prior art references anticipate or render the present invention obvious, even with the original claims.

1. Amended claim 1 makes clear that steps b through d are performed in the absence of reader input, thus, combination of Warnock and Kubota does not arrive at the claimed invention.

The major motivation to combine Warnock and Kubota to arrive at the present invention is related to Examiner's interpretation of step 1(b) of original claim 1 to encompass "user input."

According to the O.A., the justification for combining Warnock and Kubota to (putatively) arrive at the present invention, is the statement "By doing so, it would provide user more information to read based on the input reference from user" (p. 4). As amended, it is now clear that the present invention does not provide the user "more information to read based on an input reference from user," (as is required by Kubota) and thus, this cannot serve as motivation for combining said references. Applicant has amended claim 1 to completely clarify this point. In the present invention, the reference of step 1(b) is not supplied by the reader of the electronic text (unlike in Kubota). Thus, the limitation of step 1(b) is not taught by either reference in the Examiner's combination.

2. Even if combinations of Warnock, Kubota, and/or Bugaraev arrived at the present invention, it would be inappropriate to consider these combinations in an obviousness determination for the following reasons:

a) Warnock And Kubota Do Not Contain Any Justification or Motivation to Support Their Combination to Arrive at the Invention of the Amended Claims.

With regard to the proposed combination of Warnock and Kubota, it is well known that in order for any prior art references themselves to be validly combined for use in a prior art section 103 rejection, *the references themselves* (or some other prior art) must suggest that they be combined. E.g., as was stated in *In re Sernaker*, 217 USPQ 1, 6 (Fed. Cir. 1983):

“[P]rior art references in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings.”

That the suggestion to combine the references should not come from applicant was forcefully stated in *Orthopedic Equipment Co. v. United States*, 217 USPQ 193, 199 (Fed. Cir. 1983):

“It is wrong to use the patent in suit [here the patent application] as a guide through the maze of prior art references, combining the right references in the right way to achieve the result of the claims in suit [here the claims pending]. Monday morning quarterbacking is quite improper when resolving the question of non-obviousness in a court of law [here the PTO].”

As was further stated in *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 5 USPQ2d 1434 (Fed. Cir. 1988):

“Where prior-art references require selective combination by the court to render obvious a subsequent invention, there must be some reason for the combination other than hindsight gleaned from the invention itself. . . . *Something in the prior art must suggest the desirability and thus the obviousness of making the combination.*” [Emphasis applied.]

In line with these decisions, the Board stated in *Ex parte Levengood*, 28 USPQ2d 1300 (BPAI 1993):

“In order to establish a *prima facie* case of obviousness, it is necessary for the examiner to present *evidence*, preferably in the form of some teaching, suggestion, incentive, or inference in the applied prior art, or in the form of generally available knowledge, that one having ordinary skill in the art *would have been led* to combine the relevant teachings of the applied references in the proposed manner to arrive at the claimed invention. . . . That which is within the capabilities of one skilled in the art is not synonymous with obviousness. . . . That one can *reconstruct* and/or explain the theoretical mechanism of an invention by means of logic and sound scientific reasoning does not afford the basis for an obviousness conclusion unless that logic and reasoning also supplies sufficient impetus to have led one of ordinary skill in the art to combine the teachings of the references to make the claimed invention. . . . Our reviewing courts have often advised the Patent and Trademark Office that it can satisfy the burden of establishing a *prima facie* case of obviousness only by showing some objective teaching in either the prior art, or knowledge generally available to one of ordinary skill in the art, that ‘would lead’ that individual ‘to combine the relevant teachings of the references.’ . . . Accordingly, an examiner cannot establish obviousness by locating references which describe various aspects of a patent applicant’s invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent applicant has done.”

The O.A. supports the proposed combination of Warnock and Kubota with the statement “By doing so, it would provide user more information to read based on the

input reference from user” (p. 4). Now, the Amendment makes clear that the present invention does not provide the user “more information to read based on an input reference from *user*,” as is required by Kubota, and would be required (though not sufficient) for the present invention to be obvious in view of Warnock-Kubota. In the present invention, the reference of step 1(b) is not supplied by the reader of the electronic text. Thus, the limitation of step 1(b) is not taught by either reference in the Examiner’s combination.

Moreover, identification of an advantage associated with the present invention is not the same as describing the motivation that would cause a person with ordinary skill to combine Warnock and Kubota to achieve that advantage. The O.A. noted that the present invention produces an advantage (“provides more information to read”). Applicant submits that the fact that the present invention produces advantages militates in favor of Applicant because it proves that the combination produces new and previously unrealized results, and hence, is unobvious.

As stated in the above Levengood case:

“That one can *reconstruct* and/or explain the theoretical mechanism of an invention by means of logic and sound scientific reasoning does not afford the basis for an obviousness conclusion unless that logic and reasoning also supplies sufficient impetus to have led one of ordinary skill in the art to combine the teachings of the references to make the claimed invention.”

Applicant therefore submits that combining Warnock and Kubota is not legally justified and is therefore improper. Thus, Applicant submits that the rejection on these

references is also improper and should be withdrawn. Applicant respectfully requests, that if the claims are rejected on any combination of references, that the Examiner include an explanation, in accordance with MPEP 706.02, Ex parte Clapp, 27 USPQ 972 (BPAI 1985), and Ex parte Levengood, *supra*, of a “factual basis to support his conclusion that it would have been obvious” to make the combination.

b) Warnock, Kubota, and Bugaraev are individually complete, and solve different problems from the present invention.

Because Warnock, Kubota, and Bugaraev each describe complete inventions (see above summaries), each reference further lacks motivation for any combinations with other inventions. Each reference is complete and functional in itself, so there would be no reason to use parts from, or add or substitute parts to, any reference.

Moreover, applicant’s invention solves a different problem than the references, and such different problem is recited in the claims (In re Wright, 6 USPQ2d 1959 (1988)). In particular, the present invention provides “a reader with additional information about concepts referred to within an electronic text,” (Claim1) a problem clearly not addressed by any of the cited prior art. As already discussed, Warnock solves the problem of presenting a document in a predetermined form, Kubota solves a problem related to comparing documents, and Bugaraev solves a problem related to creation of an online help database.

c) Warnock teaches away from the present invention and from combinations with other inventions.

It would not be appropriate to use Warnock as a prior art reference in any combination with respect to the present invention, because Warnock in particular teaches away from the present invention.

The invention of Warnock provides an author with a specific means to present material for display to a reader, in a predetermined format selected by the author. A defining feature of Warnock is this predetermined format, which allows an author to ensure that all readers of said document see precisely the same formatting, as originally intended by the author. Warnock additionally describes methods to simplify navigation through a document, so that a reader can rapidly find desired sections of text.

Presenting additional material not contemplated by the author alongside the author's material is directly antithetical to the intent of Warnock. The predetermined format of Warnock is designed in such a way as to preclude presentation of additional material, including that related to the text being read.

Thus, not only does Warnock teach away from the present invention, but it teaches away from any combinations with other inventions that could change the material being displayed, as intended by the original author.

d) The present invention yields advantages not appreciated by Warnock, Kubota, or Bugaraev.

In the O.A., the Examiner readily appreciated the additional advantage that the present invention provides to a reader, that “it would provide user more information to read. . . .” (paragraph 6). As noted above, Warnock teaches away from this outcome. Kubota provides a scheme by which texts may be compared, but does not contemplate providing additional information to a reader who is in the act of reading a text. Bugaraev uses linguistic rules to extract key terms from a document, but also does not contemplate using this material to supply additional information to a reader who is in the act of reading a text.

e) Nobody has attempted to combine Warnock, Kubota, and/or Bugaraev in the manner suggested by the Examiner.

Although combination of Warnock, Kubota, and Bugaraev does not arrive at the claimed invention, applicant is unaware of any existing combination of these references to arrive at any invention. Moreover, if the present invention were in fact obvious due to these or any combination of prior art references, because of its advantages, those skilled in the art surely would have implemented it by now. That is—the fact that those skilled in the art have not implemented the invention, despite its great advantages, indicates that it is not obvious.

f) The present invention is in a different field from Kubota, and thus combination of Kubota with Warnock is not appropriate.

Kubota, as a system and method for searching a large number of stored documents, is irrelevant to enhancing the reading experience, which is the primary field both of Warnock and the present invention. Thus, combination of Kubota with Warnock is improper.

3. The index of claim 3 is different from that described in Kubota, and thus, the rejection of this claim over Warnock-Kubota is overcome.

Kubota describes an index file (column 13, line 13) that contains only items with the characteristics that are being searched for. For example, this index file may be used to conduct a search only of document titles, and thus contains only titles. In Kubota's example, this index file is constructed such that each title in the index file refers to a single document. In the index of claim 3, typically, each term in the index refers to one or more locations within a text where a concept referred to by the index term is discussed. To be useful in identifying related concepts elsewhere in a text (reverse-indexing, as described in the specification), an index entry in the index of claim 3 must refer to multiple such locations. Thus, the index described by Kubota is completely unlike the index described in claim 3, and thus is irrelevant to a determination of obviousness. Claim 3 is now amended to clarify that a reference to said concept is identified in step 1(c) based on its appearance in at least one index to a text, clearly excluding the type of index referred to within Kubota.

4. The index of claims 4, 5, 6, 7, 17, 23 and 31 is different from that described in Kubota, and thus, the rejection of these claims over Warnock-Kubota is overcome.

Claim 4 describes an index that includes a pointer to a reference to a concept. Claim 5 specifies that this index may be a concordance. As cited by the Examiner, in column 10, lines 29-48, Kubota describes a search engine that searches documents for specific input character strings, and returns the locations of the strings within the documents. An input document may be selected by the user. Kubota does not describe pointers that identify the locations of references to concepts; moreover, Kubota does not describe any index that contains such pointers. Thus, it seems clear that the search engine of Kubota does not describe an index that is relevant to the present invention. As cited by the Examiner, in column 12 (line 60) to column 13 (line 20), Kubota describes pull-down menus for selecting various aspects of the search that the search engine is to perform on the documents, including Boolean operations, specification of the documents to be searched, and the degree of relationship that is to be found. Kubota also describes an index of titles that may be searched, but does not make clear that this index contains pointers to references to concepts, as the index of claim 4 does. The cited example in Kubota, figure 11, does not fulfill the definition of a concordance as specified in the specification of the present invention, because the index of box 909 contains terms that refer to multiple different texts.

In any event, with respect to claims 4, 5, 6, 7, 17, and 23, it is clear that this index is not used in the context of finding related concepts, as it is in the present invention. The index of claim 31 contains the feature of ability to sort the index and contains information

regarding the frequency and location of discussions of the concepts. The index of Kubota, as described in column 11 (line 57) to column 12 (line 3), Figure 14, the abstract, column 9 (line 63) to column 10 (line 64) and column 10 (lines 29-48) does not provide the option to sort the index and does not relate the search terms to concepts.

5. Figure 3c of Warnock is not germane to claims 25, 26, 27 and 28, and thus, the rejection of these claims over Warnock-Kubota is overcome.

Figure 3c of Warnock provides a document, including a masthead, a contents section, and a portion of an article. Figure 3c provides no list of relationships *identified* between sections of text (as required by claim 25), and also provides no information about relationships between concepts *identified* in step (c), which specifies “identifying at least one reference, contained in at least one additional section of text, to a concept related to the concept identified in step b,” (as required by claim 26). As to claim 27, Figure 3c of Warnock does not make obvious how the displayed section of text could potentially be related to step (d), which specifies “providing information about a reference identified in step (c).” Figure 3c or its legend provide no basis for concluding that the displayed section of text has any relationship to a reference identified in step c. As to claim 28, although a copy of the table of contents (which could be interpreted as an outline) is provided in Figure 3c, this “outline” contains none of the information specified in step (d) about a reference identified in step (c).

6. Bugaraev does not disclose any material related to claims 16, 18, 20, 21, and 22, and thus, the rejection of these claims over Warnock-Kubota-Bugaraev is overcome.

Bugaraev, column 4 (line 60) to column 5 (line 48) discloses a catalog of key terms and relations of those key terms based on a lexical and morphological analysis of a text.

With respect to claim 16, Bugaraev does not use citation of related sources as a method for identifying related concepts. There is no reference in the quoted section of Bugaraev to consideration of cited sources in identifying concepts.

With respect to claim 18, Bugaraev, in fact, strips the text of all commands (column 5, lines 1-2), thus it is not possible for Bugaraev to identify concepts with reference to the commands, and Bugaraev in fact, teaches away from the use of embedded commands to identify related concepts

With respect to claims 20, 21 and 22, the quoted section of Bugaraev does not provide any teaching regarding methods for determining the relatedness of concepts. Thus, the applicant concludes that this prior art reference is not germane to a determination of obviousness of these dependent claims.

7. It is unclear that Kubota should qualify as prior art to all claims in the pending application.

The U.S. patent for Kubota was filed (April 17, 1997), after the filing date of provisional application 60/036305 (filed January 29, 1997). The present application is a continuation in part of application 09/015,660 (filed January 29, 1998), which claimed priority to provisional application 60/036305. Thus, the priority date relevant to the present application is January 29, 1997, for all subject matter disclosed in the provisional application. Although Kubota was filed first in Japan, the date of Japanese filing is irrelevant under 37 CFR 1.131, because provisional application was filed "before the filing date of the application on which the U.S. patent issued." Applicant respectfully requests consideration of this point, should the Examiner continue to believe that Kubota should play a role in rejection of any of the amended claims.

Conclusion (Sections A1 and A2)

For the reasons specified above, combination of the cited prior art does not render claim 1 obvious. The dependent claims incorporate all the subject matter of claim 1 and add additional subject matter which makes them *a fortiori* and independently patentable over Warnock, Kubota, and Bugaraev.

B. The Rejection Of Claim 9 For Lack Of Enablement Is Overcome.

The Examiner rejects claim 9 for lack of enablement. However, the specification (page 20, lines 6-10) specifies:

“In an even more complex embodiment, the relevance of specific links is determined by the number of searching or indexing methods that yield a specific result, thus permitting the relative ranking of results in the link display box similar to 303 or 403 in Figures 3 and 4, respectively, based on the numbers and types of methods that yield each specific result.”

This disclosure describes means by which strength between relationships may be determined. Applicant submits that this description provides a person with ordinary skill in the art with sufficient direction to make and use the invention claimed in claim 9, which is:

The method of claim 8, wherein the computer system obtains input from the user regarding the strength of relationships between related concepts to provide information about.

A person with ordinary skill in the art surely would be capable of programming a computer system to obtain input from the user regarding the desired strength of relationships to be reported upon. Thus, applicant believes that claim 9 is enabled and supported by the specification.

Moreover, the Examiner (paragraph 13) asserts that claim 9 is made obvious by the disclosure of Warnock-Kubota. It is unclear to the applicant how it is possible both for this dependent claim to be obvious and also not to be enabled. If the examiner is correct that this claim (as presented in the original application) is obvious, then one with skill in the art surely would be able to implement it.

C. O.A. Paragraph 27 erroneously groups claims independent 32-35 with the rejected claims 1-31.

The Examiner states,

“Claims 32-35 are corresponding method, system, and memory storage claims containing similar limitations as the methods described in claims [sic].”

Applicant respectfully points out that this is incorrect. Independent claim 32 states,

“A method for using a computer system to make a computer user aware of a relationship detected in at least one indexed electronic text, comprising the steps of:

- a) for a section of text, identifying a first index entry, citing said section of text;
- b) for an index entry identified in step a, identifying at least one additional index entry related to said first index entry; and
- c) providing information about a detected relationship.”

It is unclear what claim the Examiner believes claim 32 corresponds to, as claim 1-31, like claim 32, are all method claims. Moreover, independent claim 32 is distinct from all other claims, and describes a method not cited in claims 1-31.

In any event, it is clear that independent claim 32 is not rendered unpatentable by Warnock, Kubota and/or Bugaraev. None of these references describe an index that remotely resembles that described in claim 32. The only reference to an “index” in O.A. paragraphs 1-26 is that described in Kubota. However, the index described in Kubota

clearly differs from that described in claim 32. Kubota describes an index file (column 13, line 13) that contains only items with the characteristics that are being searched for. For example, this index file may be used to conduct a search only of document titles, and thus contains only titles. In Kubota's example, this index file is constructed such that each title in the index file refers to a single document. The index of claim 32 is referred to in the context of a section of text. Claim 32 requires two separate index entries to be identified, within the specified relationship parameters. Thus, the index described by Kubota is completely unlike the index described in claim 32, and thus is irrelevant to a determination of obviousness.

Independent claim 33 states,

“A computer system that provides an implied search of a text, wherein the argument of the search is material related in a defined way to material presented to a user on a computer display, wherein no real-time input is required from the user, and wherein the results of the search are displayed to the user”

Although claim 33 is a system claim, it does not correspond directly to any of claims 1-32. Claim 33 is the only claim that mentions and defines an “implied search”. Of the original claims 1-35, claim 33 is the only claim that specifically states that “no real-time input is required from the user.” Thus, this claim differs substantially from those considered by the Examiner in paragraphs 1-26.

As noted above, Warnock provides a method for presenting material in a predetermined format to a user. Kubota accepts user input regarding documents to be compared. Claim 33 requires no user input, and is not concerned with presenting

materials in a predetermined format. Thus, Warnock-Kubota does not arrive at the invention of claim 33. For this reason, and those arguments cited above against combining Warnock, Kubota, and/or Bugaraev to arrive at the amended claims, Warnock Kubota and/or Bugaraev may not be combined to arrive at claim 33.

With respect to independent claim 34, this claim has been amended to correspond to amended claim 1, and is now patentable for the same reasons that amended claim 1 is.

With respect to independent claim 35, this claim has been amended to correspond to amended claim 1, and is now patentable for the same reasons that amended claim 1 is.

CONCLUSION

For all of the above reasons, the specification and claims are in proper form, and the claims all define patentably over the prior art. Therefore, this application is in condition for allowance, which action is respectfully solicited.

CONDITIONAL REQUEST FOR CONSTRUCTIVE ASSISTANCE

Based on the arguments herein, the specification and claims of this application are proper, definite, and define novel subject matter that is also non-obvious. If, for any reason, this application is not believed to be in full condition for allowance, the constructive assistance and suggestions of the examiner pursuant to MPEP 2173.02 and 707.07 (j) are requested in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Very Respectfully,

A handwritten signature in black ink, appearing to read "Philip R Krause", written in a cursive style.

Philip R Krause

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